# 1964 BOEING ANNUAL REPORT









HIGHLIGHTS		
	1964	1963
Sales	\$1,969,487,000	\$1,771,371,000
Net earnings	45,324,000	21,679,000
Dividends paid	16,048,000	16,013,000
Net earnings per share	\$5.64	\$2.71
Dividends paid per share	2.00	2.00
Per cent net earnings to sales	2.3%	1.2%
Shares outstanding at year end	8,036,986	8,012,568
Book value per share	\$38.13	\$34.49
Salaries and wages	\$758,475,000	\$802,688,000
Average number of employees	90,900	100,400
Additions to property, plant, and equipment	\$33,600,000	\$28,200,000
Depreciation and amortization of property, plant, and equipment	24,667,000	21,559,000

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# 1964 BOEING ANNUAL REPORT

## PRESIDENT'S REVIEW AND OUTLOOK

### To the Stockholders:

For a number of years, earnings levels of The Boeing Company have been adversely affected by research, development, and start-up costs on the jet transport and helicopter programs, including their derivative models. In 1964 the Company achieved a more satisfactory result, as represented by net earnings of \$45,324,000 on sales of \$1,969,487,000. Both sales and earnings are the largest for any year in the Company's history.

The improvement is principally attributable to a continuing deferred recovery on the 707/720 jet transport programs with increased deliveries of both aircraft and spares, and a lesser charge against earnings on the 727 short-to-medium-range jet transport.

The Company is in a strong financial position and, with a substantial backlog of orders for commercial jet transports, earnings next year should be maintained at a relatively high level. However, there is a serious requirement for new business development in the military and space fields.

Although sales in 1965 on the Saturn and other space programs should increase somewhat over 1964 levels, sales on military programs will drop substantially during the coming year. The long and highly successful KC-135 tanker-transport program is being phased out with only a limited number of deliveries scheduled for 1965. The Minuteman missile program, while scheduled to continue for several years and embracing the development of an important advanced model, has passed its peak with the major part of the base installation work completed.

However, the total range of potential sales open to Boeing in the defense and space market is very substantial. While the Company has increased greatly its percentage of penetration in the commercial market, and that market itself has been experiencing a healthy and continuing growth due to increased air travel, our percentage participation in the military market is now substantially less than we have maintained over many years. An aggressive new business effort is being made in the military and space fields.

A significant organizational change, made early in 1965, has been predicated on this expanded military business objective. A separate Military Airplane Division, with headquarters at the main Seattle plant, has been established, leaving the Renton, Washington organization fully devoted to commercial business as the Commercial Airplane Division. Both organizations report to a common group vice president.

Our topmost attention is being given to the objective of winning a

present competition to build a quantity of C-5A heavy logistics transports for the Air Force, a program which the Company feels particularly well equipped to handle because of its extensive experience with heavy jet aircraft and its available capability resulting from completion of the KC-135 program.

We also have a high competitive interest in a potential manned orbiting laboratory program. The unique experience gained in developing the manned orbiting Dyna-Soar vehicle, cancelled in 1963, is applicable to this effort. Substantial research and development work has subsequently been carried forward in this field. The capability available—in both human and facility resources—by reason of the Dyna-Soar cancellation and the phasing down of Minuteman places us in strong position to compete for this type of business.

A similar competitive effort is being made in a variety of other fields, many of them in the study stage but with important potentialities. These include an Air Force advanced military transport with vertical/short takeoff and landing capabilities, an airborne short-range attack missile, a Navy advanced surface missile system, an advanced strike fighter, a Mars exploratory vehicle, and a proposed further extension of an anti-ballistic-missile defense system experimental development.

In all new business competitions, our objective is to reach a position of such superiority in capability, performance, and cost-effectiveness that we may be clearly judged to deserve the award. We have high expectations based on what we feel is outstanding talent and managerial skill that has been built up in our divisions, along with appropriate facilities and a condition of financial soundness that can add strength to our effort.

In the space field, the Boeing Company has a very substantial responsibility as producer of the main, first-stage booster for the National Aeronautics and Space Administration's Apollo vehicle, the destination of which is the moon. During the past year, our responsibility in this program has been further extended to include the integration of all elements of the Saturn launch vehicle and subsequent test and ground support. This assignment, given Boeing partly as a result of demonstrated systems-management effectiveness in the successful Minuteman program that includes several major participating contractors, represents a profound responsibility in one of the nation's foremost technological endeavors.

Another advanced responsibility is being shouldered in the Lunar Orbiter project for NASA, with the assistance of major subcontracting participants. The mission of the Lunar Orbiter is to make precision closeup photos of the moon's surface and other scientific observations in preparation for lunar landings.

In the commercial field but nonetheless a government competition—

This progress emphasizes the need for contractual arrangements which will permit the construction of prototypes without undue burden of risk on the industry—a risk we feel it is proper for the government to bear in light of the long-term economic advantage to the country in maintaining air transport leadership. Without this assistance the risk is out of proportion to the capitalization of the prospective builders. As was found with the subsonic jet transport development, a period of at least twelve years may elapse before profits from production can be expected.

We have taken the position that the government support involved should not be thought of as a subsidy but rather as a commercially repayable investment on the part of the government. The development has now reached the point of readiness for the next logical forward step, namely prototype construction. We have proposed that determination of contractual arrangements for the production stage be deferred until the prototype phase is under way.

Another commercial development of major significance during the year was the achievement of an outstanding short-haul transport design. A decision to proceed with production of this 737 twin-jet, short-range transport was reached early in 1965, opening up an important remaining segment of the transportation market. It is believed that the short-range field will offer a continuing sales opportunity.

An important consideration is the fact that air transportation—both passenger and cargo—remains a growth business, the rate of growth having recently accelerated. This fact has likewise accounted for the opportunity to offer longer body versions of the 707 to further lower transportation costs on long-distance, high-density traffic routes. Production of these models will proceed if expected airline orders materialize. Whether still larger transports, on the scale of the C-5A logistics transport, will be later justified by traffic growth remains to be seen.

If, together with the encouraging progress in the commercial transport side of our business, we are able to acquire new military and space projects to more nearly match our previous participation in the government business field, then the opportunity for further growth of the Company as a whole appears good.

A further development during the year has been increased emphasis on international operations, including the acquisition of a minority equity interest in the German aerospace engineering firm of Boelkow GmbH. Although this move will have no appreciable present effect on either costs or income, it is of seedling significance because of the acknowledged importance of economic growth in the European Common Market area.

During 1964 substantial progress was made with respect to the development and stabilization of our helicopter programs. The charges against earnings which these programs have required will be significantly reduced in 1965. We feel that in the Model 107 Marine Corps "Sea Knight" and the Army "Chinook", we have two highly competitive products and that a definite opportunity exists for further expansion of the helicopter market, particularly in light of the importance of this type of craft in remote-area warfare.

The undertaking of the various major new business programs I have discussed, should we be selected as contractor, will require substantial continued expenditure for facilities in addition to the constant requirement of investment in the research and development effort so essential in this era of explosive technological advance. Our financial position will permit us to make the investments that would be required.

It should be further recognized that the decision to undertake the 737 and the longer body versions of the 707 will have an adverse effect on earnings during the early years of the programs. Your Company charges against earnings as incurred, research, developmental, testing, and other general overhead costs applicable to such programs. It is not possible to comment on the effect on earnings of an SST program until the basis upon which the program will be undertaken is known.

Sales for the coming year, by reason of an increase in scheduled deliveries of commercial jet transports to approximately 175, should approach the 1964 level.

With commercial sales in the near term accounting for an increasing proportion of total sales and with improved profit margins applying to commercial aircraft deliveries, total corporate earnings should remain at a relatively high level in 1965 despite the decline in military contract sales and the impact of the costs in connection with the introduction of new and improved models of commercial aircraft.

1965 will be a challenging and, we believe, a rewarding year for The Boeing Company.

March 8, 1965

President

PS ... Su. Quem



The missile: Minuteman The ship: Hydrofoil sub chaser The helicopters: Sea Knight The aircraft: KC-135 and B-52







## MILITARY PROGRAMS

All deliveries of Minuteman intercontinental ballistic missiles during the year continued the record of being on or ahead of original schedules. By the end of 1964, the announced Strategic Air Command Minuteman force was 650 missiles.

As production and installation of Minuteman I neared contract fulfillment, testing of Minuteman II—a more powerful, more sophisticated missile—was begun. First firing of the advanced longer range version resulted in a fully successful performance. The Defense Department has announced plans to proceed with systematic replacement of the first series with Minuteman II missiles and the placing of an additional squadron of 50 missiles in Montana. While Minuteman II represents a substantial business effort, it is of less magnitude than the original program.

With the completion of trials, the United States Navy has released for fleet duty the Marine Corps "Sea Knight" (CH-46A) assault helicopter. Its Navy counterpart, the UH-46A, was also released for airborne supply service between ships at sea. During the year, the Company's "Chinook" (CH-47A), adopted as the Army's standard medium transport helicopter, performed successfully in exercises at Fort Benning. All three types are produced in the Company's Morton, Pennsylvania plant.

The Wichita Branch continued to devote a significant portion of its resources to the modification and modernization of the B-52 intercontinental jet bomber fleet. In addition to extending the normal life expectancy of the big bombers into the 1970s, the Department of Defense has requested performance and mis-



Early concept drawing of Boeing heavy logistics airplane

sion capability far beyond that called for in the specifications to which the aircraft were built.

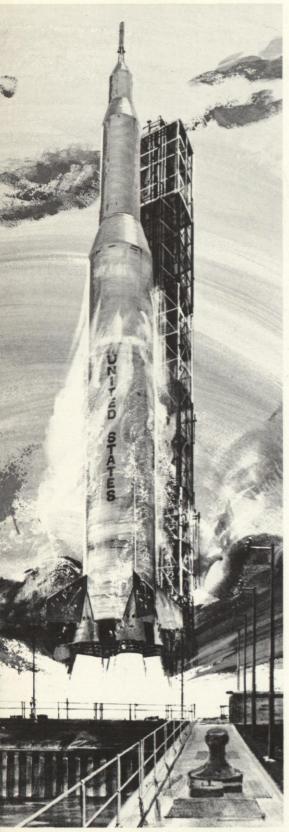
The phasing out of KC-135 jet tanker-transport production, as the year ended, marked the end of a 10-year program during which 820 of the aircraft were produced. The program has been consistently successful, both for the Company and the Government. As production phased out, aircraft were being delivered to the Air Force at less than half the cost of those first ordered.

Boeing turbine engines, being produced for the U. S. Navy's antisubmarine helicopters, continue their outstanding reliability record. An advanced engine of increased horsepower is scheduled for early qualification. For the Army, design and testing of highly advanced turbine engine components is being conducted under a research contract.

The Swedish firm Volvo has issued a production contract for Boeing gas turbines as a boost power source for a new Swedish Army tank following successful field trials.

Under a U. S. Army development and test contract for a very-high-acceleration rocket (HiBEX), tests were begun late in 1964. The rocket concept has possible use in the anti-missile field.

Hydrofoil work for the Navy during 1964 centered on support for rough-water tests of the submarine chaser High Point, and refurbishing of the Navy hydrofoil experimental test boat Fresh I. Both craft were involved in investigations of the use of wholly submerged, wing-like foils.



Saturn V-Apollo booster



Full-scale model of Lunar Orbiter space craft

## NASA AND FAA PROGRAMS

Work has continued during the year on several contracts which the Company holds with the National Aeronautics and Space Administration (NASA) and the Federal Aviation Agency (FAA).

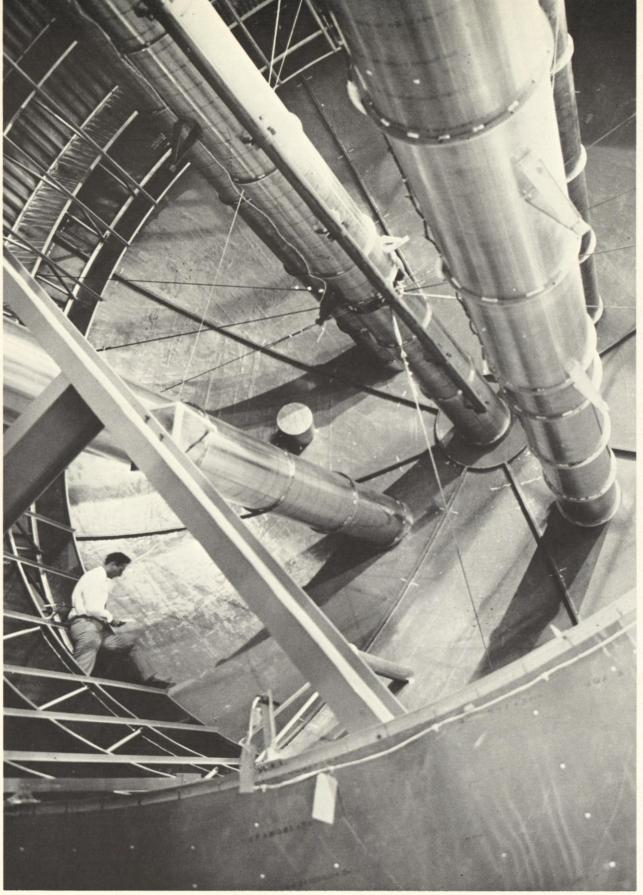
The largest of these contracts, both in dollar volume and in size of the end product, covers the first-stage (S-1C) booster program for the Saturn V Apollo launch vehicle. The objective of the Apollo program is to place a two-man team on the moon in the late Sixties.

The original contract called for Boeing to supply the primary booster which, with its  $7\frac{1}{2}$  million pounds of thrust, will be the largest ever built. Extension of the contract to include system engineering, integration of the entire launch vehicle, and ground support and testing provides a substantial new business assignment.

Also related to the Apollo moon landing is the Company's contract to build lunar orbiters which will be placed in orbit to transmit back to earth pictures of extensive portions of the moon's surface. Such pictures will be used in selecting the best landing site for moon explorers. Another contract provides for study of a mobile lunar laboratory from which astronauts would carry on scientific missions on the moon's surface.

Other study contracts with NASA include: an orbital station from which men could assemble and service space vehicles, placing of a giant manned telescope in orbit above the earth, the mission support requirements of interplanetary travel, and recovery and re-use of space vehicles and their boosters.

Details of the Company's contract with the FAA relating to the supersonic transport will be found in the Commercial Aircraft section of this report.



Huge tanks of Saturn V booster hold 500,000 gallons of rocket fuel—which will be burned in  $2\frac{1}{2}$  minutes

## STOCKHOLDERS' AIRLINE GUIDE

The Following Airlines Fly Boeing Jets

AIR FRANCE

AIR MADAGASCAR

ALL NIPPON AMERICAN

ANSETT-ANA

AVIANCA

BRANIFF

BWIA (WEST INDIES)

CONTINENTAL

EASTERN

EL AL ISRAEL

ETHIOPIAN

FLYING TIGER

IRISH

JAPAN

LUFTHANSA

NATIONAL

NORTHWEST

PACIFIC NORTHERN

PACIFIC SOUTHWEST

PAKISTAN

PAN AMERICAN

QANTAS

SABENA

SAUDI ARABIAN

SOUTH AFRICAN

TAP (PORTUGUESE)

TRANS-AUSTRALIA

TRANS WORLD

UNITED

VARIG

WESTERN

WORLD AIRWAYS



#### 10

# COMMERCIAL AIRCRAFT

Both new orders and deliveries of Boeing jetliners in 1964 surpassed all previous records. During the year 133 commercial aircraft—707s, 720s, and 727s—were delivered to airline customers and orders for 155 were announced. Deliveries since the start of the commercial jet program stood at 496 at year end, with another 199 on order.

Early in 1964 the first Model 727 tri-jets were placed in airline service. The immediate reaction of both airlines and passengers was enthusiastic. By close of the year 10 airlines were operating 727s and had carried almost three and one-quarter million passengers. In earning potential for the airlines and appeal to the traveling public, the 727 is outstanding. Substantial additional sales are anticipated.

Orders for 23 convertible cargo-passenger jetliners during the year pointed up the steadily increasing use of air cargo by American and foreign business. The Company sees the cargo jet as an important factor in future commercial transport sales.

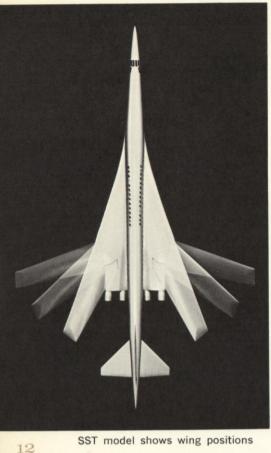
During the year a number of scientific advances in jet airliner



technology were achieved. These included improvements in high-lift methods which make shorter runways available to jet aircraft, and a precision approach control landing system which permits landings when ceilings are as low as 50 feet and visibility limited to one-quarter mile.

Increased competition for the available airline business has been experienced during 1964. In the field of medium- and short-range passenger jets, one domestic and three foreign aircraft rivals for airline equipment funds are aggressively being offered. Three United States airlines have ordered a British short-range twin jet, a Boeing customer airline in the Far East has ordered the British medium-range jetliner, and an American competitor is actively offering its new short-range twin jet throughout the world. An advanced version of the French twin jet with U. S. engines is also in production.

Decision to proceed with production of the 737 short-range commercial jet was made only after the Company was convinced it had a design clearly superior to others being offered in





Scale model of 737 short-range jetliner on Boeing Field

the short-range market. By holding the decision, the advantage of additional technical developments was gained. As a result, the 737 will be the most economic, versatile, and attractive airplane of its type. Lufthansa (German) Airlines was the first to place an order for the new aircraft.

Following submittal of the Company's first supersonic transport (SST) proposal in the Federal Aviation Agency competition, the competitive field was reduced to Boeing and one other aircraft manufacturer. The government contract provides that Boeing pay 25% of the cost of its continuing studies. The Company's SST design team submitted its Phase IIA report near the end of the year and the Federal agency was continuing the team efforts of the competitors on a month-to-month basis while the reports were under study.

A Company investment of more than \$20 million before the FAA competition opened has helped to develop a design which the management feels is a completely practical step into the future of transportation.

## INTERNATIONAL

As a further step in increasing the outlets for its products and talents the Company has sought to establish advantageous relationships overseas. Such relationships take several different forms, for example, licensing for manufacture and sale of Boeing products, joint ventures, technical assistance and exchange agreements, and direct ownership of stock in overseas corporations.

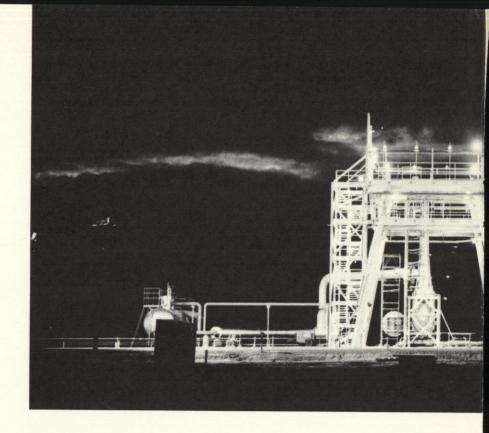
The Company has a licensing agreement with Kawasaki of Japan under which the 107 helicopter is manufactured in Japan. In another category is the separate company—FN-Boeing Turbines, S.A.—formed by Boeing and the Belgian firm Fabrique Nationale d'Armes de Guerre. Its purpose is to arrange for sales and servicing of Boeing gas turbines in Europe and, if requirements develop, to manufacture in Europe.

Most recent development in the international field has been Boeing's acquisition of a minority equity interest in Boelkow Entwicklungen KG of Germany. The Boelkow firm has the largest technical and engineering group of any single aerospace company in Germany. Boeing technical people are working with the Southern German Development Ring, of which Boelkow is a partner, in the development of an advanced tactical fighter aircraft employing vertical takeoff and landing techniques and variable sweep wings. This design is now being evaluated by the German government. As of January 1, 1965, when Boeing acquired a minority equity interest, the Boelkow firm was changed from a limited partnership to a limited liability company under the name Boelkow GmbH.

Through the new Belgian and German companies Boeing has interests in leading industrial areas of the European Economic Community—the Common Market.

In another area of Company activity, a central commercial aircraft sales office for Europe, Africa and the Middle East has been maintained in Geneva, Switzerland since 1956.





## RESOURCES

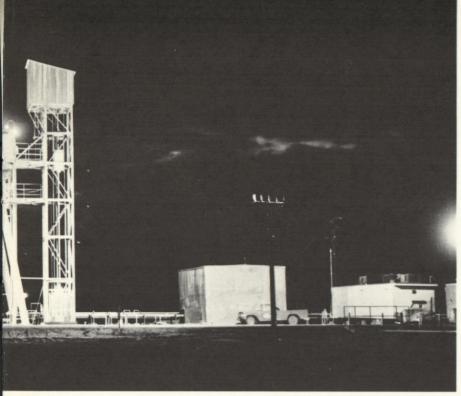
Boeing management maintains a continual assessment of the resources essential to efficient and profitable performance of its current contracts, the development of new capabilities required by advancing technologies, and the development of new business.

The most important resource is people. Throughout the years it has been Company policy to obtain the most able personnel available and to integrate them into skilled, dedicated teams. The Company also provides opportunities for growth. Graduate study is encouraged. Management development programs are conducted on a continuing basis. On-the-job training and off-hour classes in a multiplicity of subjects are offered.

Financially the Company is in position to support those new business programs which appear firm and which offer reasonable opportunity for growth and profit, provided they do not entail undue risk.

In the ten years through 1964, the Company made new facility investments amounting to some \$278 million. Continued substantial expenditures for additional facilities are anticipated during future years.

Plant areas and equipment available for proposed new business programs have been carefully scheduled. For the support of our space efforts the Company is investing more than \$15 million in space simulation and other research laboratories at Kent, Wash-



Boeing rocket engine test tower looms in desert night near Boardman, Oregon

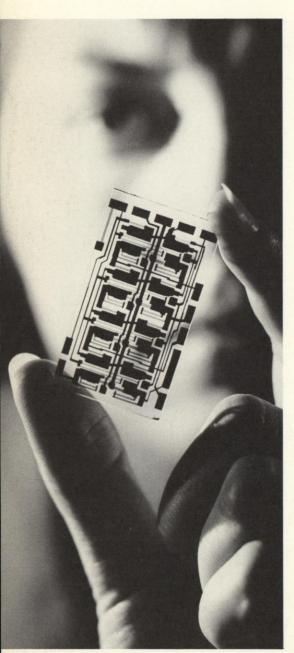
ington near Seattle. This facility, to be ready for start of occupancy in March of 1965, promises to be as important to our space-age developments as the wind tunnel laboratories have been to our aircraft programs.

For C-5A heavy logistics system production we have available Plant II in Seattle and are prepared to add there the high bay area and other special facilities which would be required by the extraordinary dimensions of the aircraft.

An SST prototype could be accommodated in the Developmental Center near Plant II, with provision for production space within the Seattle-Renton complex when the project reaches that stage. Additional manufacturing space is available at the Wichita, Kansas plant.

The Company's resource of experience is likewise important. To the C-5A proposal, for example, Boeing brings a background of design, development, and production of more than 3400 jet aircraft of more than 100,000 pounds gross weight.

A long-standing Company practice—subcontracting of major portions of large contracts—is consonant with government policy. Over many years the Company has subcontracted more than 51 per cent of its total sales dollars with approximately 15,000 firms throughout 48 states. Of these firms, nearly 75 per cent are small businesses which receive about 29 per cent of the subcontract dollars.



Boeing thin film microelectronic circuit

## RESEARCH

The direct impact of research upon the day-to-day operations of the Company has never been more apparent than during 1964 when every division has been engaged in competitions demanding the most advanced scientific and technical information.

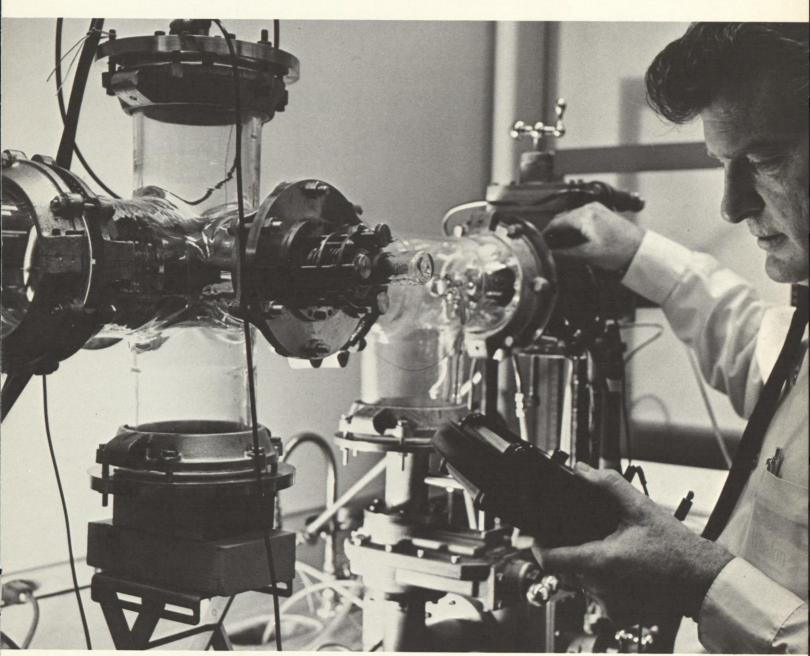
Company research falls into two broad categories: scientific and product research. The former is illustrated by the Boeing Scientific Research Laboratories, the latter by research engineers and scientists, working in laboratories throughout the Company, who direct their efforts toward developing and improving processes and products in such diverse fields as propulsion, aerodynamics, electronics, flight test, manufacturing, reliability, and a score of others. The two categories are complementary.

As an example of the product of research in the aeronautical field, Boeing developed during the year a multiple-wheel landing gear to permit heavy aircraft—such as the C-5A—to land on soft fields. Equipped with these experimental devices the Boeing jet prototype made repeated landings and takeoffs from the unimproved soft surface of a dry lake.

Space exploration raises entirely new problems for investigation — life-support systems for man in an alien and inhospitable environment, the effects of zero gravity on man's ability to perform normal functions, the characteristics of and manufacturing processes applicable to the exotic materials required for space vehicles.

In the Kent facility, a gigantic space simulation chamber had been put through its basic tests before year end. So large that it can test whole space vehicles, the chamber is a massive tool of modern research.

Company scientists determined during the year that hundreds of "hot spots" exist on the moon's surface. The finding, significant to the Apollo moon-landing project, was hailed as "the astrophysical event of the year" by one of England's outstanding astronomers.

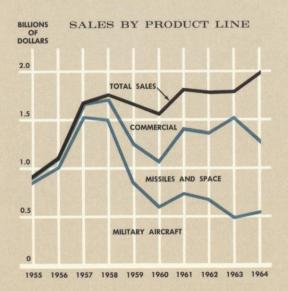


Laboratory study of short circuit possibility between power terminals in the plasma sheath surrounding a space vehicle during re-entry

## FINANCIAL REVIEW

SALES (in millions)			1964	1963
Commercial		\$	701	\$ 261
Missiles and Space			731	1,033
Military Aircraft .			537	477
Total		\$1	,969	\$1,771

Although there were significant changes in sales volume on a number of major programs, total sales for 1964 were the highest in the Company's history. The commercial aircraft program, for the first time, was the major contributor to sales among the Company's principal programs. A \$440 million increase in commercial sales reflects not only the first full year of 727 short-to-medium-range jet aircraft deliveries, but also Model 707 and 720 deliveries at a somewhat higher level than in 1963. Military aircraft sales increased by \$60 million, with increased deliveries of KC-135s and of Model 107 and Chinook helicopters more than offsetting the reduction of activity on B-52 modification and maintenance programs. Growth of Saturn, together with initial sales on the Lunar Orbiter, balanced the adverse impact of the cancellation of the Dyna-Soar program at the end of 1963, with the result that space programs continued as a major source of sales. As anticipated, there was a substantial reduction in sales on the Minuteman program in 1964. This program remains, nevertheless, a major factor in the Company's operations with significant sales volume forecasted for a number of years.



Sales in 1965 should approximate the same high level attained in 1964. However, as has been true over the past several years, the composition of sales, as to major programs, will continue to change as the Company responds to developments in the aerospace market.

Sales value of commercial aircraft to be delivered in 1965 will be up from 1964. The 1965 total will constitute approximately one-half of total sales volume.

Sales on the Saturn Booster and Lunar Orbiter programs in 1965 will increase over 1964 levels and moderate increases in deliveries of Model 107 and Chinook helicopters are scheduled. However, with only limited deliveries of KC-135s in 1965, and Minuteman activity reduced substantially, sales to the U. S. Government in 1965 will be materially lower than 1963-64 levels.

EARNINGS	1964	1963
Net Earnings (in millions)	\$45.3	\$21.7
Profit Margin	2.3%	1.2%
Earnings per share	\$5.64	\$2.71

The improvement in 1964 earnings over the 1963 level is principally attributable to increased deliveries of 707/720 aircraft at somewhat better margins, increased commercial spares volume, and reduced charges relating to research, developmental, testing, and initial production activities on the Model 727 jet transport. The substantial number of commercial jet orders received during the year favorably influenced program costs through the maintenance of a high level of production activity throughout the year. The foregoing favorable factors more than offset the decline in earnings on Government contracts.

Cumulative charges against earnings on the Model 727 program reached a level during the year that approximated the estimated loss that would be taken on a program limited to 200 aircraft. The program, for annual financial statement reporting purposes, therefore, was

"blocked" at that point. This blocking practice, which is consistent with that followed on the 707/720 program, results in the total program non-recurring costs and high initial production costs being charged against the first 200 units. Non-recurring costs include research, development, testing, production engineering, and production tooling.

The effect of the above-described practice is that earnings for financial statement purposes are reported only when the extremely high risks related to costs and sales volume have passed their peak. While this practice might be regarded as conservative on a program that ultimately proves successful, we believe it properly recognizes the dynamic, volatile, and high-risk nature of the commercial transport aircraft business—particularly as related to risks involved in the initial years of a new program.

Although 96 of the 112 727s scheduled for delivery in 1965 are in the first block of 200 units, the 727 program, based on current cost estimates, should have a favorable impact on earnings in 1965. Deliveries in 1965 of the 16 units beyond the first 200 and deliveries in 1966 and subsequent years should show a significant improvement in profit margins in that for financial statement reporting purposes they will not have to bear the impact of an allocation of the non-recurring and initial production costs associated with the program.

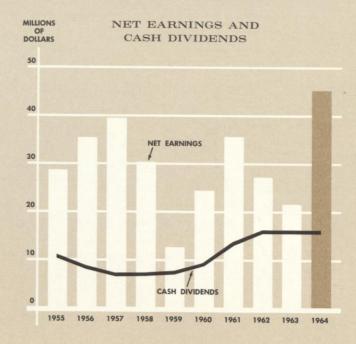
Although the Company's Model 107 and other vertical lift aircraft programs will result in charges against earnings in 1965, the level of such charges will be substantially reduced from that of prior years.

A forecast of future commercial aircraft program earnings cannot be a straight extrapolation of recent trends but must consider the effect on earnings of costs incurred and risks assumed relating to the maintenance of the Company's competitive position in the Free World jet aircraft market. The Company can sustain its position in the commercial aircraft

market only by the timely introduction of improvements in aircraft design. This can be achieved only by the maintenance of a high degree of technological capability and a thorough understanding of airline requirements. The costs of maintaining such capability and understanding are substantial. The cost and risk associated with the introduction of advanced aircraft, whether they be new models or major improvements to existing models, are extremely high and under the Company's accounting practice, directly affect current earnings.

In 1965 the Company will undertake a number of new commercial aircraft programs that will adversely affect earnings through charges relating to research, developmental, testing, and initial production activities. The Model 737 two-engine, short-range jet has been committed to production and it is expected that similar action will be taken on an extended body version or versions of the current 707 intercontinental jet.

However, it is believed that the effect on reported earnings in 1965 of increased deliveries of 707/720s, the fact that the 727 will for the first time have a favorable impact on earnings, and a reduction in charges relating to the Model 107 and other VTOL programs, should more than offset charges against income related to the 707 model improvement program



and to the 737 and the earnings impact of a substantial reduction in sales volume on military programs.

#### FINANCIAL POSITION

The overall financial position of the Company is strong with working capital of \$252 million and no bank loans outstanding. Long-term debt aggregates \$110 million, down \$5.4 million from the previous year end.

Gross additions to property, plant, and equipment amounted to \$33.6 million.

Expenditures for new facilities are anticipated to continue at a high level in future years.

Quarterly dividends of \$.50 per share were paid in 1964, continuing the rate established in the fourth quarter of 1961.

A summary of the sources and uses of funds during the year is as follows:

Sources (in millions)	
Net earnings	\$45.3
Depreciation and amortization of	
property, plant, and equipment	24.7
Total	\$70.0
Uses (in millions)	
Additions to property, plant,	
and equipment	\$33.6
Cash dividends paid	16.0
Retirement of long-term debt	5.4
Increase in jet transport financing.	4.5
Increase in working capital	8.3
Other, net	2.2
Total	\$70.0

#### BACKLOG

Total backlog of unfilled orders at the end of 1964 increased slightly from the previous year end, but the composition of unfilled orders changed materially. As stated in previous reports, unfilled orders from the United States Government are limited to amounts obligated to contracts by the procuring agencies. If recognition were given to unfunded amounts be-

lieved to be firmly established in Department of Defense and NASA procurement plans, unfilled orders would be substantially increased, principally for missile and space programs.

Backlog (in millions)	1964	1963
Commercial	\$1,139	\$ 878
Missiles and space	324	490
Military aircraft	381	447
Total	\$1,844	\$1,815

## FEDERAL INCOME TAXES

The Internal Revenue Service has reviewed and agreed to all Federal income tax returns through the year 1960, except for certain refund claims which are still pending and have not been recorded in the accounts. The income tax liability stated on the balance sheet is believed to provide adequately for the years 1961 through 1964.

#### RENEGOTIATION

During 1964, the Renegotiation Board issued clearances with respect to renegotiable profits of the Company for the years 1961 and 1962.

The Annual Report for 1963 reported that the United States Court of Appeals for the Ninth Circuit had denied the Company's appeal from a Tax Court decision increasing the determination of excessive profits for the year 1952 from \$10 million to \$13 million and that a petition for review of the Court of Appeals' decision had been filed with the Supreme Court of the United States. The petition for review was denied by the Supreme Court and the additional refund which had previously been provided for was made.

In renegotiation proceedings the Company has received clearances for the years 1956 through 1962. Still pending in the Tax Court of the United States are petitions of the Company for re-determination of Renegotiation Board findings of excessive profits for the years 1953, 1954, and 1955. All refunds determined to be payable by the Renegotiation Board have been paid or provided for in the accounts. The Company cannot predict the effect of the 1952

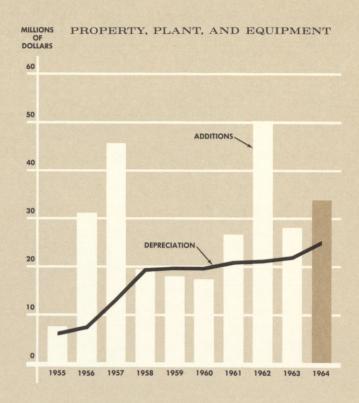
decision on the Tax Court petitions for the years 1953, 1954, and 1955, nor what the Board's actions will be for the years 1963 and 1964. In view of these uncertainties and the belief of the Company that no excessive profits were realized, no provision has been made for renegotiation refunds other than those presently determined by the Board.

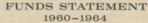
#### INCENTIVE COMPENSATION

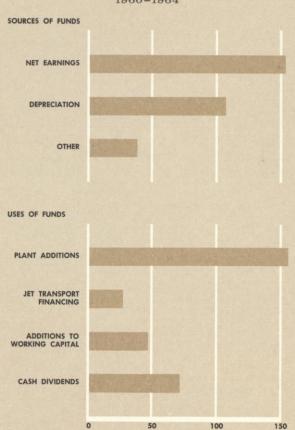
As stated in last year's annual report, the Company was at that time completing a program for a revised administration of the Incentive Compensation Plan to be in operation commencing with the year 1964. An amount was not set aside for the year 1963 under the Incentive Compensation Plan because it was believed that the administration of the Plan was not meeting the desired objectives.

The principal objective of the Incentive Compensation Plan should be to increase the profit performance of the Company. Under the revised administration of the Plan, a rather limited number (230 for the year 1964) of the management personnel participate. It is recognized that awards under the Plan are a part of the total compensation of these individuals. Their base salaries are established at a lower level than would be the case if there were not such a plan. Thus a significant portion of total compensation of these individuals is at risk depending upon the profit performance of the various organizations within the Company and of the entire Company. Further, opportunity is accorded these individuals of obtaining greater total compensation than would have been provided if the Company did not have such a Plan.

Annual profit targets for the various divisions and the entire Company are established as are goals for obtaining and preparing for new business. The amount placed in the fund is determined by performance against these goals. For the year 1964, an amount of \$1,600,000 was set aside in the Incentive Compensation fund which will be distributed to the individual participants during the early part of 1965.







MILLIONS OF DOLLARS

# TEN YEAR COMPARATIVE FINANCIAL DATA

Dollars (other than per share amounts) in millions

## SALES, EARNINGS, AND DIVIDENDS

	SALES	EARNINGS INCOME		NET EARNINGS			CASH DIVIDENDS		
		AMOUNT	% OF SALES	AMOUNT	% OF SALES	PER SHARE	AMOUNT	PER	
1964	\$1,969	\$89.0	4.5	\$45.3	2.3	\$5.64	\$16.0	\$2.00	
1963	1,771	44.9	2.5	21.7	1.2	2.71	16.0	2.00	
1962	1,769	56.3	3.2	27.2	1.5	3.40	16.0	2.00	
1961	1,801	73.9	4.1	35.7	2.0	4.47	13.5	1.70	
1960	1,555	51.8	3.3	24.5	1.6	3.07	9.1	1.14	
1959	1,649	26.4	1.6	12.7	0.8	1.60	7.4	0.92	
1958	1,752	63.4	3.6	30.2	1.7	3.82	7.0	0.89	
1957	1,674	80.8	4.8	39.8	2.4	5.10	6.7	0.86	
1956	1,096	74.1	6.8	35.4	3.2	4.56	8.2	1.05	
1955	905	58.8	6.5	28.6	3.2	3.69	10.6	1.37	

## FINANCIAL POSITION DATA

	WORKING CAPITAL	LONG-TERM NOTES	LEASED AIRCRAFT	PLANT AND EQUIPMENT		LONG-TERM DEBT		HOLDERS'	
				AT COST	NET		AMOUNT	PER SHARE	
1964	\$252	\$ 1	\$29	\$315	\$130	\$110	\$306	\$38.13	
1963	243	9	17	285	121	115	276	34.49	
1962	196	13	10	261	115	65	270	33.78	
1961	178	25	32	214	86	65	258	32.38	
1960	199	17	8	189	81	71	236	29.62	
1959	204	2		172	83	71	221	27.68	
1958	197	_		155	85	71	213	26.92	
1957	102			136	84		186	23.90	
1956	101	_	_	91	52	_	152	19.60	
1955	98	_		60	27		124	16.03	

Notes: All per share data adjusted to reflect stock dividends and stock splits.

Vertol Aircraft Corporation, acquired in 1960, included in data for prior years.

# PRINCIPAL SOURCES AND USES OF FUNDS

		SOURCES		USES					
E/	NET ARNINGS	DEPRECIATION	DEBENTURES AND CAPITAL STOCK SOLD	CASH DIVIDENDS	ADDITIONS TO PLANT	INCREASED AIRCRAFT FINANCING	INCREASED WORKING CAPITAL		
\$	345.3	\$24.7	(\$4.6)	\$16.0	\$33.6	\$ 4.5	\$ 8.3	1964	
	21.7	21.6	50.7	16.0	28.2	3.1	46.9	1963	
	27.2	21.0	0.8	16.0	50.1	(34.7)	18.0	1962	
	35.7	20.6	(5.6)	13.5	26.8	32.4	(20.7)	1961	
	24.5	19.4	_	9.1	17.4	22.3	(4.7)	1960	
	12.7	19.5	2.2	7.4	18.1	2.5	7.0	1959	
	30.2	19.1	73.8	7.0	19.5	_	94.8	1958	
	39.8	12.9	0.9	6.7	45.6	_	1.4	1957	
	35.4	7.1	0.7	8.2	31.2	-	2.2	1956	
	28.6	5.8	1.0	10.6	7.6	-	16.2	1955	

## GENERAL INFORMATION

SHARES OUTSTANDING	BACKLOG	FLOOR AREA (In Million Square Feet)			EMPLO	OYEES		
		BOEING OWNED	LEASED	GOV'T OWNED	AVERAGE NUMBER	SALARIES AND WAGES		
8,036,986	\$1,844	11.3	2.1	11.2	90,900	\$758	1964	
8,012,568	1,815	11.1	2.0	11.2	100,400	803	1963	
7,992,376	1,620	10.8	2.3	10.8	104,100	768	1962	
7,982,430	1,869	7.2	1.9	11.8	89,800	629	1961	
7,971,647	2,139	6.6	1.7	11.4	81,700	556	1960	
7,970,640	2,018	6.4	1.8	11.7	92,300	579	1959	
7,768,735	2,470	6.1	2.2	11.7	95,300	566	1958	
7,351,196	2,482	6.0	2.3	11.3	99,300	537	1957	
7,028,155	3,141	4.2	2.3	9.4	76,000	400	1956	
3,569,255	2,749	4.2	2.0	8.6	70,000	342	1955	

# BALANCE

### ASSETS

	Decem	ber 31,
CURRENT ASSETS	1964	1963
Cash and marketable securities	\$ 47,767,000	\$ 23,234,000
Amounts receivable under United States Government contracts	179,403,000	176,955,000
Other accounts and notes receivable	61,557,000	20,763,000
Inventories	195,033,000	318,111,000
Prepaid expenses	3,206,000	3,101,000
Total Current Assets	\$486,966,000	\$542,164,000
PROPERTY, PLANT, AND EQUIPMENT, at cost	\$314,929,000 <u>184,727,000</u> \$130,202,000	\$285,462,000 <u>164,145,000</u> \$121,317,000
LEASED AIRCRAFT OTHER ASSETS AND DEFERRED CHARGES	\$ 29,226,000 5,047,000	\$ 16,989,000
	\$651,441,000	\$690,272,000

#### 25

	Decem	ber 31,
CURRENT LIABILITIES	1964	1963
Notes payable to banks	\$ _	\$ 37,100,000
Accounts payable and accrued expenses	225,909,000	236,792,000
Allowance for renegotiation, net of taxes	7,768,000	8,668,000
Federal taxes on income (1964, less \$24,547,000 U. S. tax anticipation bills)	1,617,000	16,245,000
Total Current Liabilities	\$235,294,000	\$298,805,000
LONG-TERM DEBT	\$109,707,000	\$115,132,000
STOCKHOLDERS' INVESTMENT		
Capital stock, par value \$5 a share— Authorized, 10,000,000 shares Issued and outstanding at stated value: 1964, 8,036,986 shares;		
1963, 8,012,568 shares	\$128,675,000	\$127,846,000
Retained earnings	177,765,000	148,489,000
	\$306,440,000	\$276,335,000
	\$651,441,000	\$690,272,000
See notes to financial statements.		

LIABILITIES AND STOCKHOLDERS' INVESTMENT

## STATEMENT OF NET EARNINGS

	YEAR ENDED DECEMBER 31,	
	1964	1963
Sales	\$1,969,487,000	\$1,771,371,000
Costs and expenses	\$1,877,424,000	\$1,721,211,000
Interest and debt expense, net	3,039,000	5,281,000
Federal taxes on income	43,700,000	23,200,000
	\$1,924,163,000	\$1,749,692,000
NET EARNINGS	\$ 45,324,000	\$ 21,679,000
Additional provision for 1952 renegotiation refund, net of taxes		900,000
BALANCE TRANSFERRED TO RETAINED EARNINGS	\$ 45,324,000	\$ 20,779,000

# STATEMENT OF STOCKHOLDERS' INVESTMENT YEAR ENDED DECEMBER 31, 1964

	CAPITA SHARES	AL STOCK AMOUNT	RETAINED EARNINGS
Balance at January 1, 1964	8,012,568	\$127,846,000	\$148,489,000
Net earnings			45,324,000
Shares sold to officers and employees under stock option plan	23,912	804,000	
Shares issued in exchange for Convertible Subordinated Debentures	506	25,000	
Cash dividends paid, \$2.00 a share			(16,048,000)
Balance at December 31, 1964	8,036,986	\$128,675,000	\$177,765,000

See notes to financial statements.

#### NOTES TO FINANCIAL STATEMENTS

#### INVENTORIES:

Work in process on military fixed-price incentive type contracts is stated at the total of direct costs and overhead applicable thereto, less the estimated average cost of deliveries based on the estimated total cost of the contracts. Work in process on straight fixed-price contracts is stated in the same manner, except that applicable research, developmental, administrative, and other general expenses are charged directly to earnings as incurred. At December 31, 1964, work in process aggregated \$475,302,000, less advances and progress payments of \$306,635,000.

To the extent that estimated costs of units scheduled for production, determined in the above manner, are expected to be greater than total sales price, the portion of such excess related to work in process is currently charged to earnings. The resultant inventory is stated at estimated proportionate sales value.

Commercial spare parts and general stock materials, aggregating \$26,366,000, are stated at average cost, not in excess of realizable value.

#### INVESTMENT TAX CREDIT:

The investment tax credit is being deferred and amortized ratably over the lives of the applicable assets. The cumulative amount deferred at December 31, 1964 is \$3,600,000.

# LONG-TERM DEBT AND RESTRICTIONS ON RETAINED EARNINGS:

	December 31,		
	1964	1963	
5% Notes payable to			
insurance company	\$ 50,000,000	\$ 50,000,000	
5% Sinking Fund			
Debentures	29,201,000	34,601,000	
4½% Convertible			
Subordinated			
Debentures	30,506,000	30,531,000	
	\$109,707,000	\$115,132,000	

The Notes payable to insurance company, maturing in 1983, are payable in annual installments of \$2,750, 000 beginning in 1966.

Sinking fund requirements under the 5% Sinking Fund Debentures, due in 1978, are \$2,700,000 annually. Debentures aggregating \$5,399,000, previously reacquired, have been cancelled but may be applied against future sinking fund requirements.

The 4½% Convertible Subordinated Debentures, due in 1980, are convertible at two shares for each \$100 principal amount. Of the Company's unissued capital stock, 610,124 shares are reserved for conversion of the debentures. The annual sinking fund requirements beginning in 1968 amount to \$1,750,000 less credits for previously converted debentures.

The indentures under which the long-term obligations were issued place various restrictions on the use of retained earnings for the payment of cash dividends or acquisition of the Company's capital stock or subordinated indebtedness. Under the most restrictive of these provisions, retained earnings totaling \$61,460,000 at December 31, 1964 were not so restricted.

#### OPERATING CHARGES:

The following charges were incurred in the years ended December 31:

	1964	1963
Depreciation and		
amortization of plant		
and equipment	\$24,667,000	\$21,559,000
Retirement plan		
contributions	28,174,000	25,237,000

#### STOCK OPTIONS:

At December 31, 1964, options for 87,715 shares of the Company's stock, at prices ranging from \$30.50 to \$63.88, were outstanding, of which 23,238 shares were exercisable. During 1964, 23,912 shares were issued upon exercise of options, options were granted for 1,750 shares, and options for 7,216 shares were cancelled.

An additional 93,233 shares are available for future grants under the restricted stock option plan.

### RENEGOTIATION:

For details regarding the status of renegotiation refer to page 20.

### ACCOUNTANTS' REPORT

TOUCHE, ROSS, BAILEY & SMART

610 WASHINGTON BUILDING SEATTLE, WASHINGTON 98101

March 8, 1965

Board of Directors The Boeing Company Seattle, Washington

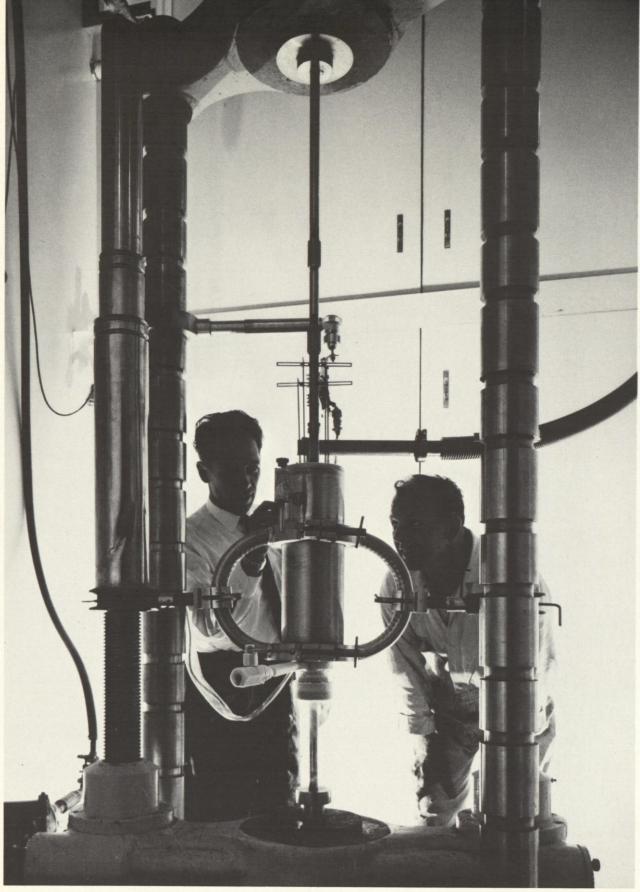
We have examined the accompanying balance sheet of The Boeing Company as of December 31, 1964 and the related statements of net earnings and stockholders' investment for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to obtain satisfactory confirmations of receivables from the United States by direct communication, but we satisfied ourselves as to such accounts by other auditing procedures.

In our opinion, subject to the uncertainties as to required renegotiation refunds (see page 20), the financial statements referred to above present fairly the financial position of The Boeing Company at December 31, 1964 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Also, in our opinion, the action of the Board of Directors on March 8, 1965, in setting aside the sum of \$1,600,000 for the year 1964 under the Incentive Compensation Plan for Officers and Employees, is in conformity with the provisions contained in the first paragraph of Section 2 of such plan.

Certified Public Accountants

Touche, Rase, Bailey + Smart



Titanium and other space-age materials are tested on this machine under stresses up to 400,000 pounds and temperatures from  $-423^\circ$  to  $+2000^\circ$  F.



WILLIAM M. ALLEN



C. L. EGTVEDT



E. H. BOULLIOUN



W. L. CAMPBELL



J. B. CONNELLY



ARTEMUS L. GATES



C. B. GRACEY



CRAWFORD H. GREENEWALT



H. W. HAYNES



ROBERT H. JEWETT



A. F. LOGAN



GEORGE C. MARTIN



ORVILLE E. MELBY



LOWELL P. MICKELWAIT



ROBERT J. MURPHY JR.



J. E. PRINCE



WILLIAM G. REED



GEORGE S. SCHAIRER



D. E. SKINNER .



GEORGE SNYDER



EDWARD C. WELLS



GEORGE H. WEYERHAEUSER



BEN M. WHEAT



THOMAS R. WILCOX



T. A. WILSON



D. J. EULER



THORALF E. GAMLEM



V. F. KNUTZEN



FRED P. LAUDAN



H. W. NEFFNER



MAYNARD L. PENNELL



GEORGE H. STONER



R. W. THARRINGTON



Lysle A. Wood



JOHN O. YEASTING

## OFFICERS AND DIRECTORS

WILLIAM M. ALLEN President, Director

C. L. EGTVEDT Chairman, Director

E. H. BOULLIOUN Vice President—Manager, Missile Branch, Aero-Space Division

W. L. Campbell Director, President, General America Corp., Seattle

J. B. Connelly Vice President—Assistant General Manager, Commercial Airplane Division

D. J. Euler Vice President—General Manager, Turbine Division

THORALF E. GAMLEM Vice President—Assistant General Manager, Commercial Airplane Division

ARTEMUS L. GATES Director, Consultant, New York

C. B. Gracey Vice President— Manufacturing

Crawford H. Greenewalt\* Director, Chairman of the Board, E. I. duPont de Nemours & Co., Wilmington, Delaware

H. W. HAYNES Vice President—Finance

ROBERT H. JEWETT Vice President—Assistant General Manager, Aero-Space Division

V. F. KNUTZEN Controller

Fred P. Laudan Vice President, Director Emeritus

A. F. LOGAN Vice President

GEORGE C. MARTIN Vice President—Engineering

ORVILLE E. MELBY Treasurer

LOWELL P. MICKELWAIT Vice President—Industrial and Public Relations, Director

Robert J. Murphy Jr. Vice President— Washington Representative

H. W. Neffner Vice President— Government Contracts MAYNARD L. PENNELL Vice President—Assistant Director, Product Development

J. E. Prince Vice President— Administration and Corporate Secretary, Director

WILLIAM G. REED Director, Chairman, Simpson Timber Company, Seattle

George S. Schairer Vice President— Research and Development

D. E. SKINNER Director, President, Skinner Corporation, Seattle

George Snyder Vice President—Aero-Space Division

George H. Stoner Vice President—Assistant Division Manager, Launch and Space Systems, Aero-Space Division

R. W. Tharrington Vice President—General Manager, Vertol Division

EDWARD C. WELLS Group Vice President— Airplanes, Director

George H. Weyerhaeuser Director, Executive Vice President, Weyerhaeuser Company, Tacoma

BEN M. WHEAT Vice President—Manager, Wichita Branch, Military Airplane Division

THOMAS R. WILCOX Director, Executive Vice President, First National City Bank, New York

T. A. WILSON Vice President—General Manager, Military Airplane Division

Lysle A. Wood Vice President—General Manager, Aero-Space Division

John O. Yeasting Vice President—General Manager, Commercial Airplane Division, Director

## DIRECTORS EMERITUS

DARRAH CORBET D. A. FORWARD FRED P. LAUDAN J. E. SCHAEFER DIETRICH SCHMITZ

■ Directors \* Elected June 29, 1964 The Boeing Company is composed of an administrative headquarters organization and five operating divisions. Headquarters, the Aero-Space Division, the Military Airplane Division, and the Turbine Division are located in Seattle, Washington. The Commercial Airplane Division is in Renton, Washington 12 miles from Seattle. The Military Airplane Division includes a major branch in Wichita, Kansas. The Launch Systems Branch of the Aero-Space Division conducts its principal operations in New Orleans, Louisiana and Huntsville, Alabama in connection with the Saturn project of the National Aeronautics and Space Administration. The Vertol Division is in Morton, near Philadelphia, Pennsylvania. The Company also has two wholly-owned subsidiaries—Boeing of Canada, Limited, located in Arnprior, Ontario, and Boeing International Corporation, with principal offices in Seattle.

GENERAL COUNSEL F
GENERAL AUDITORS T
TRANSFER AGENT F
REGISTRAR F

HOLMAN, MARION, BLACK, PERKINS & COIE
TOUCHE, ROSS, BAILEY & SMART
FIRST NATIONAL CITY BANK, NEW YORK CITY
BANKERS TRUST COMPANY, NEW YORK CITY

THE BUEING COMPANY

GENERAL OFFICES - 7755 EAST MARGINAL WAY - SEATTLE, WASHINGTON 98124

